Early Warning and Reporting System (EWARS) Weekly Bulletin

(7th Epidemiological Week) 28th February 2016



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- 1. The Early Warning Reporting System (EWARS) includes data since January 2015 till date, including comparison of same period during last year.
- 2. Post-earthquake hospital based syndromic surveillance system covering public and private hospitals in the 14 districts highly affected by the April 2015 Earthquake.

Section 1: The Early Warning and Reporting System (EWARS)

Highlights								
•	Two deaths from SARI were reported this week from United Mission Hospital, Palpa and the cases were from Arghakhanchi and Palpa districts.							
•	One case of Kala-azar was reported this week, from Lumbini Zonal Hospital, Rupandehi and the case was from Arghakhanchi district.							

- One case of Malaria (*plasmodium vivax*) was reported from Lumbini Zonal Hospital, Rupandehi and the case was from Bardiya district.
- No case of Dengue was reported this week.

The EWARS was established in 1997 to strengthen the flow of information on vector-borne and other outbreak prone infectious diseases from the district to Epidemiology and Disease Control Division (EDCD) and Vector-Borne Disease Research and Training Center (VBDRTC), Hetauda. Rapid Response Teams (RRTs) can be mobilized at short notice to facilitate prompt outbreak response at Central, Regional and District level. They can also support local level health institutions for investigation and outbreak control activities.

This information system is hospital-based and is currently operational in 48 hospitals (out of 81 sites) throughout Nepal (Figure 1). So far, the EWARS mainly focuses on the **weekly reporting** of number of cases and deaths (including "zero" reports) of six priority diseases/syndromes—Malaria, Kala-azar, Dengue, Acute Gastroenteritis (AGE), Cholera and Severe Acute Respiratory Infection (SARI), and other epidemic potential diseases/syndromes (like enteric fever). It equally focuses on **immediate reporting** (to be reported within 24 hours of diagnosis) of one confirmed case of Cholera, Kala-azar severe and complicated Malaria and one suspect/clinical case of Dengue as well as 5 or more cases of AGE and SARI from the same geographical locality in one week period.

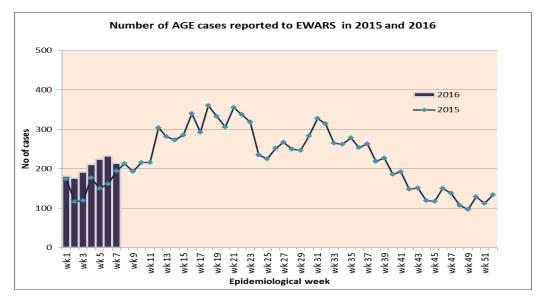


1.1 Acute Gastro-Enteritis and Cholera

214 cases of AGE were reported in 7th epidemiological week of 2016. Among 214 cases, the majority of cases were from Kathmandu (19 cases), Kailali (19 cases), Kanchanpur (16 cases), Morang (16 cases), Ramechhap (16 cases) and Dhading (14 cases) districts. The number of AGE cases reported in seventh week this year slightly exceeds the number of AGE cases reported in the same week last year (194 cases).

No Death from AGE was reported this week. Three deaths from AGE were reported so far this year.

Cholera: No cholera cases were reported through the EWARS system this year.

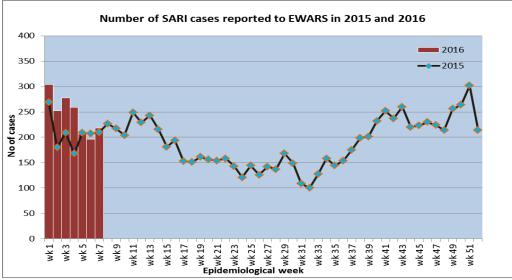


1.2 Severe Acute Respiratory Infection (SARI)

218 cases of SARI were reported in 7th epidemiological week of 2016. The cases of SARI reported this week slightly exceed the number reported in the same week last year (210 cases). Among 218 cases, 33 were from Jhapa, 29 from Kailali, 23 from Rupandehi, 20 from Morang and 14 from Parsa district.

Two deaths from SARI were reported this week from United Mission Hospital, Palpa and the cases were from Arghakhanchi and Palpa districts. Ten deaths from SARI were reported so far this year.

The number of SARI cases reported through EWARS has peaked in week 11 (256 cases), week 43 (260 cases) and week 51 (302 cases) in 2015. Eighty-one deaths from SARI were reported in year 2015.



1.3 Enteric Fever

In seventh week of 2016, 20 cases of enteric fever were reported including 4 cases from Parsa district and 3 each from Kavre and Sindhupalchok and 2 each from Bara and Illam district. The number of cases of enteric fever was peaked in week 37 in 2015 (71 cases).

1.4 Malaria

One case of Malaria (*plasmodium vivax*) was reported in week 7 from Lumbini Zonal Hospital, Rupandehi and the case was from Bardiya district. Only two cases of malaria were reported so far this year. Ninety cases of Malaria were reported through EWARS in 2015.

1.5 Dengue

No case of Dengue was reported this week. Only one case of dengue was reported so far this year. Fifty-eight cases of Dengue were reported through EWARS in 2015.

1.6 Kala-azar

One case of Kala-azar was reported this week, from Lumbini Zonal Hospital, Rupandehi and the case was from Arghakhanchi district. Seventeen cases of Kala-azar were reported so far this year. 135 cases were reported through EWARS in 2015.

Section 2: Post-Earthquake Hospital Based Syndromic Disease Surveillance

Epidemiology and Disease Control Division (EDCD) has been continuing post-earthquake hospital based syndromic surveillance system. The system covers 38 hospitals and primary health care centres in 14 earthquake affected districts; however 7 districts reported in last two weeks.

The objective of hospital based syndromic surveillance is to rapidly identify any increase in a number of outbreak prone syndromes. It helps us to ensure that outbreaks are not missed. The number of syndromes crossing the threshold level (doubling of the average of the previous 7 days, with a minimum of 5 cases) triggers an alert. But only one case triggers the alert for suspected cholera and fever with rash. Similarly, more than 5 cases in a 7 days' period trigger an alert for fever with jaundice.

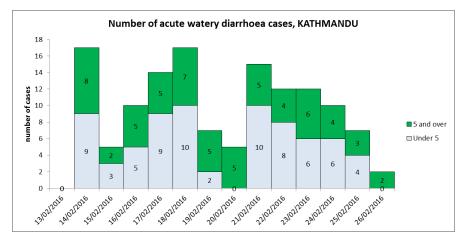
The surveillance includes 8 syndromes: Influenza like illness (ILI), severe acute respiratory infection (SARI), acute watery diarrhoea, acute bloody diarrhoea, suspected cholera, fever with rash, fever with jaundice and fever without rash and jaundice. In this report, the data analysis was done for last 14 days.

Highlights

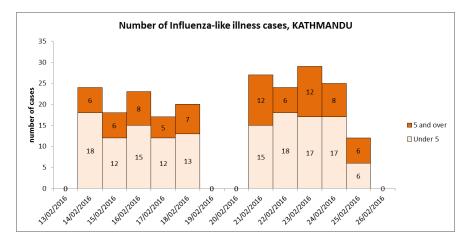
- The number of **Acute watery diarrhoea** peaked on 18th February with 28 cases.
- Ten cases of Acute bloody diarrhoea were seen in last two weeks.
- The number of Influenza like Illness (ILI) peaked on 23rd February with 29 cases.
- The number of **Severe Acute Respiratory Infection** (SARI) peaked on 16th February with 25 cases.
- Only one case of **Fever with jaundice** were seen in last two weeks.
- The number of **Fever with rash** peaked on 21st February with 10 cases.
- The number of **Fever without rash and jaundice** peaked on 24th February with 34 cases.

Analysis of information on 8 syndromes collected from hospitals in the earthquake affected 14 districts within 21 days shows that except in Kathmandu districts, no remarkable observations (increase or decrease) of outbreak prone syndromes were noticed. Reports were received from Gorkha, Kavre, Lalitpur, Okhaldhunga, Ramechhap, and Rasuwa districts, while Bhaktapur, Dhading, Dolakha, Makwanpur, Nuwakot, Sindhuli and Sindhupalchowk districts did not report in last weeks.

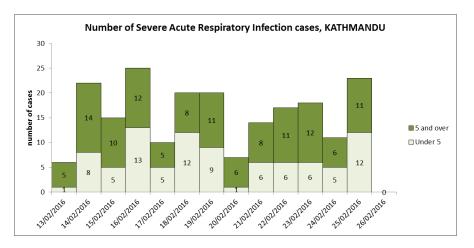
In Kathmandu, the highest number of acute watery diarrhoea was reported on 14th and 18th February respectively with 17 cases. The daily cases reported seem to be fluctuating over the weeks.



In Kathmandu, the highest number of influenza like illness was reported on 23rd February with 29 cases.



In Kathmandu, the highest number of severe acute respiratory infection was reported on 16th February with 25 cases.



Acknowledgement

The Epidemiology and Disease Control Division highly acknowledges the contribution from all the medical recorders, EWARS focal persons, rapid response team members and support from WHO and NHSSP for preparation of this bulletin.

Site Code	Sentinel Sites	Timeliness (%)	Completeness (%)	Site code	Sentinel Sites	Timeliness (%)	Completen ess (%)
101	Mechi ZH, Jhapa	96	100	125	MZH, Kanchanpur	100	100
102	Koshi ZH, Morang	100	100	126	DH, Doti	94	85
103	DH, Sunsari	100	100	127	DH, Bardiya	98	100
104	BPKIHS, Dharan	92	85	128	DH, Mahottari	92	100
105	DH, Dhankuta	100	100	129	DH, Dadeldhura	0	0
106	SZH, Saptari	98	100	130	DH, Rasuwa	94	98
107	RKUP, Lahan, Siraha	96	100	131	DH, Sankhuwasabha	0	0
108	DH, Siraha	100	100	132	AMDA Hosp., Jhapa	100	100
109	JZH, Dhanusha	0	0	133	DH, Chautara	100	100
110	DH, Rautahat	90	98	134	DH, Sarlahi	88	57
111	DH, Bara	0	0	135	DH, Sindhuli	94	100
112	NSRH, Parsa	94	100	136	DH, Illam	98	100
113	DH, Makawanpur	94	57	137	Dhulikhel H., Kavre	98	100
114	NZH, Chitwan	92	100	138	DH, Solukhumbu	0	0
115	Kanti CH, Kathmandu	88	71	139	DH, Dolpa	0	0
116	STH, Kathmandu	98	100	140	DH, Humla	0	0
117	UMH, Palpa	98	100	201	Lamjung Comm DH, Lamjung	96	98
118	PCH, Na walparasi	94	100	202	DH, Dhading	100	100
119	PBH, Kapilvastu	98	100	203	DH, Ramechhap	98	100
120	LZH, Rupandehi	100	100	209	Jiri H, Dolakha	88	14
121	RSRH Dang	0	0	211	DH, Tanahun	94	71
122	MWRH, Surkhet	98	85		Excellent (>8	30)	
123	BZH, Banke	0	0		Satisfactory	(50-79)	
124	SZH, Kailali	98	100		Bad (<50)		

Timeliness & completeness of reporting from sentinel sites:

Note: EWARS reporting form (in MS Excel format) is available at EDCD's official website <u>www.edcd.org.np</u>. This bulletin is also available at the website.